

Wayne Ives, Instream Flow Specialist
Watershed Management Bureau
NH Department of Environmental Services
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RE: Comments on Lamprey River Water Management Plan; Public Comment Period

20 June 2011

Dear Wayne,

Please accept these comments on the Lamprey River Water Management Plan (WMP). The mission of The Nature Conservancy is to preserve the plants, animals, and natural communities that represent the diversity of life on earth by protecting the lands and waters they need to survive. The Conservancy's freshwater conservation includes decades of working to balance human and ecosystem needs in rivers.

We applaud the use of similar methods employed by DES and its partners, particularly basing flows on magnitude, duration, and timing necessary to sustain river life, as defined by the Natural Flow Paradigm. We also applaud DES and its partners for defining human needs, such as recreation and water supply, as part of the list of Instream Public Uses, Outstanding Characteristics, and Resources (IPUOCRs). We support balancing water for nature and people, particularly where management actions resulting in minor adjustments provide relatively high benefit for the majority of uses and resources.

In general, we support the method, science, and approach used by DES throughout the Instream Flow Program's pilot study. While there are multiple ways to define and protect instream flows, the methods used by DES are science-based, detailed, and can serve as base line against which to compare future conditions. The staff at DES has been responsive to input and comment from multiple parties. We urge DES to employ an adaptive management approach in the future, which will allow for flexibility, and requires employing new information and tools as they become available.

While we do not offer comments on specific recommendations for each dam owner and water user, we do support DES's proposal that during emergency drought periods (catastrophic low flows), water from impoundments be released to protect downstream resources. Based on the available data, such draw-downs would be rare, and would have minor impacts to human and ecosystem needs relative to the benefits downstream. Similarly, we support retaining more water in impoundments during winter months to ensure there is enough water storage for potential use in summer months. Retaining higher winter pools would also support lake ecosystem processes and can help maintain long-term water quality and wildlife habitat. We believe reducing the winter drawdown can be done in a way that achieves both human and ecosystem objectives.

We recommend that DES identify a catastrophic flow level, regardless of duration, that will require management if, or when, it is reached. For example, if during severe drought, the cubic feet per second (cfs) flow falls below XX cfs, water releases would be utilized to maintain a minimum flow level. DES should define that minimum flow based on the combination of historic hydrograph data and the IPUOCR analysis already performed. While conservation measures may already be in place during such a rare

event, it seems important for an Instream Flow Program to define the absolute minimum allowable flow, no matter its duration, timing, or seasonality.

We also recommend that DES define a monitoring and adaptive management approach that will inform future Instream Flow management and program decisions. The online tools that compare current flow data against Protected Flow thresholds are a good start – they allow for comparison between defined thresholds and actual flow conditions. How will DES provide for changes in thresholds and/or management decisions, particularly as patterns of climate and extreme precipitation events change over time? River flows fluctuate over time, and patterns are not necessarily detectable over a few years or even decades. DES should address how they will adapt given new information. Because fisheries are one of the primary IPUOCRs defining flows, monitoring their response to flow management would be an essential part of any long-term adaptive management approach.

In closing, we would like to re-iterate our support of DES and its partners for developing a systematic, detailed, and science-based Water Management Plan. River ecosystems and the human and natural resources they support, are inherently complex and notoriously difficult to manage. DES has, for years, utilized the best tools and data to develop comprehensive decision-support protocols for Instream Flow, and we support and applaud their efforts. We hope they continue to act in a way that is responsive to human needs, and protects the resources under their charge.

Sincerely,



Doug Bechtel
Director of Freshwater Conservation